UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,674	02/19/2004	Adam D. Iley	GB920030077US1	5227

7590 02/20/2007 IBM Corporation IP Law Department 11400 Burnet Road Austin, TX 78758	**EXAMINER** KHATRI, ANIL

ART UNIT	PAPER NUMBER
2191	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/782,674	ILEY ET AL.
	Examiner	Art Unit
	Anil Khatri	2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>19 February 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-8</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-8</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>19 February 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>2/19/04</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

The disclosure is objected to because of the following informalities: (See page 2, lines 20-30, incomplete information is cited, Vol, no. etc.).

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: *"A Method, Apparatus and Computer Program for Executing a Program by Incorporating Threads"*.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 USC 101 because they disclose a claimed invention that is an abstract idea as defined in the case *In re Warmerdam*, 33, F 3d 1354, 31 USPQ 2d 1754 (Fed. Cir. 1994).

Analysis: Claims 1-8 are disclosed by the applicant as being a "method for executing a program...". Since the claims are each a series of steps to be performed on a computer the processes must be analyzed to determine whether they are statutory under 35 USC 101.

Examiner interprets that the claims 1-8 are non-statutory because they do not disclose that how a method claims is able to process on a first thread, return predefined return value and enabling a processor without incorporating steps permitting to process instructions in computer one by one and then see the results upon completion. Applicant submits no substance so that it can be realized what are the intentions are and what is to be achieved by first thread and return values. Thus, claims 1-8 are not able to produce any useful and concrete results so its functionality can be realized, therefore, claims 1-8 are non-statutory and rejected under 35 USC 101.

Further, it was noted that dependent claim 7 is computer program code claim. Examiner interprets that claim 7 is non-statutory because claim recites computer program code are program, per se i.e. the description or expressions of the program are not physical things nor are they statutory process as they do not act being performed. Computer programs do not define any structural and functional interrelationship between the computer program and other claimed aspect of the invention which permits the computer program's functionality could be realized. Therefore, computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process. Therefore, claim 7 is non-statutory and rejected under 35 USC 101.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are generally narrative and indefinite, failing to conform with current U.S.

practice. They appear to be a literal translation into English from a foreign document and are

replete with grammatical and idiomatic errors.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for

omitting essential steps, such omission amounting to a gap between the steps. See MPEP

§ 2172.01. The omitted steps are: linking, loading, returning control, executing etc.

Claims 1-8 recites the limitation "assuming." There is insufficient antecedent basis for

this limitation in the claim. Further, it is unclear and un-deterministic what exactly applicant is

assuming for, what is completed and what is instructions assuming for?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by *Agesen et al*

USPN 7,117,481.

Regarding claims 1, 4 and 8

Agesen et al teaches,

processing, on a first thread, a function defined by the function call, the function having

one or more programmer predefined typical return values (column 17, lines 35-39, "a first thread

acquires...", column 18, lines 31-38, in table 3..");

for each predefined return value, pre-processing, on an additional thread, the one or more

subsequent instructions assuming that the function returned that pre-defined return value

(column 18, lines 51-62, "by working through...remain suspended", column 15, lines 56-60, "that

returns vales..."),

thereby enabling processor, on completion of processing said function, to make use of the pre-

processing completed by the additional thread which used the actual return value (column 9,

lines 50-57, "in order to avoid...arriving process", column 15, lines 56-60, "that returns vales...").

Regarding claims 2 and 5

Agesen et al teaches,

pre-processing on each additional thread the plurality of subsequent instructions until a function

is reached which is of external effect (figure 2, column 15, lines 35-44, 'all threads that... the

designer); and

blocking on function having external effect until the actual return value is determined by the first

thread (column 19, lines 44-51, "let TryLock ()... lock was acquired or not).

Regarding claims 3 and 6

Agesen et al teaches,

the blocking step also blocks on reaching a function which is affected by an external event
(column 19, lines 53-64, "that spinning and blocking... adaptive spinning/blocking lock).

Regarding claim 7

Agesen et al teaches,

program code means adapted to perform, when said program is run on a computer, the method of
claim 1 (figure 1).

Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Anil Khatri whose telephone number is 571-272-3725. The
examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the
organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANIL KHATRI
PRIMARY EXAMINER